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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/775,305

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G. Rodney Nelson JR.

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EXAMINER

VANDERPUYE, KENNETH N

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/775,305	<b>Applicant(s)</b> NELSON ET AL.	
	<b>Examiner</b> Kenneth N Vanderpuye	<b>Art Unit</b> 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-26 is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-18, 27-39, 41-43 is/are rejected.
- 7) ☒ Claim(s) 14 and 40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
    a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1- 10, 15, 18, 27, 29-32, 32-33, 35-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Jalali et al.(5,828,662).

With regards to claim 1, Jalali teaches a method comprising the steps of: allocating both a first and second coded channels in a common direction to support synchronized communications from a transmitter to a receiver(Fig. 4, SSRC channel, access channel), assigning a time segment (SSRC slots) in which the transmitter communicates an indication to a target receiver by generating a reference signal(synchronization message) over either the first or second coded channels(Fig. 4, SSRC channel is used to generate the sync signal).

Claim 2 is rejected because the SSRC channel contains only synchronization information which is functionally equivalent to pilot information.

Claim 3 is rejected because the transmitter is one of multiple field units(mobile) and the receiver is a base station.

Claim 4 is rejected because the reference signal does not include FEC information(Fig. 4).

Claim 5 is rejected because the reference signal does not include a data payload(Fig. 4, payload sent in traffic channels).

Claim 6 is rejected because when the synch message is received by the base station, a traffic channel is assigned to the mobile(Fig. 3@211)

Claims 7-8 are rejected because the synch message sent by the mobile on the uplink is used to maintain synchronization.(Fig. 4)

Claim 9 is rejected because the SSR channel repeats itself after t SSr channel time slots.(col. 6 lines 23-27).

Claim 10 is rejected in light of Fig. 4 in Jalali because each transmitter is assigned one of multiple repeating and adjacently spaced time segments in which to communicate with a target receiver over a first or

second coded channel, each assigned a time segment corresponding with a separate link between a transmitter and target receiver(see Fig. 4).

Claim 15 is rejected because Jalali teaches the use of timing markers to maintain synchronization(col. 1 lines 41-44)

Claim 18 is rejected because Jalali teaches assigning an SSRC slot using the paging channel.(Fig. 1).

With regards to claim 27, Jalali teaches a method comprising the steps of: allocating both a first and second coded channels in a common direction to support synchronized communications from a transmitter to a receiver(Fig. 4, SSRC channel, access channel), assigning a time segment (SSRC slots) in which the transmitter communicates an indication to a target receiver by generating a signal(synchronization message) at a n adjusted power level(col. 5 lines 24-34) over either the first or second coded channels(Fig. 4, SSRC channel is used to generate the sync signal).

Claims 29-32, 35, 36 are rejected for the same reasons as claim 2-4, 6, 9-10 respectively

Claim 33 is rejected because Jalali teaches a transmitter programmed to operate at its lowest power setting.(col. 5 lines 16-20)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jalali et al. in view of Abramson(5,537,397).

With regards to claim 11, Jalali does not teach maintaining transmissions in channels in a time by analyzing the synch signal and adjusting timing of the transmitter by sending a message from the receiver to the transmitter indicating whether to advance or retard timing so that subsequently generated synch signals fall in the corresponding time segment. This is taught by Abramson(col. 5 lines 58-65) It would have been obvious to one of ordinary skill in the art to combine Jalali with Abramson with for the purpose of continually adjusting synchronization. The motivation being to account for changes in distance between the transmitters and the receiver.

With regards to claim 16, Jalali fails to teach a time adjusting message. This is taught by Abramson as stated above. Abramson teaches

using a pilot channel to convey this information. It is obvious to one of ordinary skill in the art that one may use either a pilot channel or a paging channel to convey this information which ever is convenient.

Claims 12-13, 17 is rejected because the use of a single bit or multi-bit logic sting or its logic level to indicate advance or retard timing is obvious as a matter of design choice.

Claims 28, 34, 37-39, 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jalali et al. in view of Saints et al.(6,097,972).

With regards to claim 28 Jalali fails to teach wherein the power level is adjusted based on feedback messages. Saints teaches feedback messages sent to the transmitted for adjusting power control. Hence it would have been obvious to one of ordinary skill in the art to combine this feature with Jalali for the purpose of informing the transmitter to increase or decrease power. The motivation being to avoid unnecessary interference with other transmitter.

With regards to claims 34, 37, 41Jalali fails to teach measuring the power of the received signal and adjusting subsequent transmissions. This is taught by Saints. Saints measures the received signals and uses power control bits to command the transmitter to increase or decrease power.

Hence it would have been obvious to one of ordinary skill in the art to combine this feature with Jalali for the purpose of informing the transmitter to increase or decrease power. The motivation being to avoid unnecessary interference with other transmitter.

Claims 38-39, 42 are rejected because the use of a single bit or multi-bit logic sting or its logic level to indicate and increase or decrease in power level is obvious as a matter of design choice.

Claim 43 is rejected because Jalali teaches assigning an SSRC slot using the paging channel.(Fig. 1).

***Allowable Subject Matter***

Claims 19-26 are allowed.

Claims 14, 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth N Vanderpuye whose telephone number is 703-308-7828. The examiner can normally be reached on M-F(7:30-5:00) Second Friday Off.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KNV  
3/26/05



KENNETH VANDERPUYE  
PRIMARY EXAMINER